

Serial No.: 10/689,565
Docket No.: ST02010USU (246-US-U1)

CLAIMS

1. (Previously Presented) A radio receiver apparatus in receipt of a spread spectrum radio signal having a first signal tracking channel and a second signal tracking channel, comprising:

a demodulator that demodulates a first signal in the spread spectrum radio signal into the first signal tracking channel and a second signal in the spread spectrum radio signal into the second signal tracking channel;

a crosscorrelator connected to the first tracking channel and the second tracking channel;

a signal processor that identify a carrier wave jamming signal with the crosscorrelator that is in a mode to identify carrier wave jamming signals and employs a fixed predetermined code for a pseudo random number (PRN) code;

a tracker that tracks the carrier wave jamming signal; and

a signal canceller subtracts the carrier wave jamming signal from the spread spectrum signal.

2. (Original) The radio receiver apparatus of claim 1, where the signal canceller further including:

a signal generator that generates a replica carrier wave jamming signal having a phase from the carrier wave jamming signal having another phase and subtracts the replica carrier wave jamming signal from the spread spectrum signal to cancel the carrier wave jamming signal.

Serial No.: 10/689,565
Docket No.: ST02010USU (24b-US-U1)

3. (Original) The radio receiver apparatus of claim 2, further includes:
a signal rotator that rotates the phase of the replica carrier wave jamming signal.
4. (Original) The radio receiver apparatus of claim 3, where the signal rotator
adjusts the phase of the replica carrier wave jamming signal to match the other phase of
the carrier wave jamming signal in the spread spectrum signal.
5. (Previously Presented) The radio receiver apparatus of claim 1, where the
crosscorrelator has a code of all ones for the pseudo random number (PRN) code.
6. (Original) The radio receiver apparatus of claim 1, wherein the spread
spectrum radio signal is a position signal.
7. (Original) The radio receiver apparatus of claim 1, wherein the
crosscorrelator is at least a 1024 bit wide correlator.
8. (Original) The radio receiver apparatus of claim 7, where the crosscorrelator
further includes:
an at least a 1024 bit wide match filter.

Serial No.: 10/689,565
Docket No.: ST02010USU (246-US-U1)

9. (Previously Presented) A method of removing a carrier wave jamming signal from a spread spectrum signal having a first signal tracking channel and a second signal tracking channel, comprising:

demodulating a first signal in the spread spectrum radio signal into the first signal tracking channel and a second signal in the spread spectrum radio signal into the second signal tracking channel;

correlating the first tracking channel and the second tracking channel with a crosscorrelator;

changing the crosscorrelator from a cross correlation identification mode to a carrier wave jamming signal identification mode and employs a fixed predetermined code for a pseudo random number (PRN) code;

computing a product of the first signal tracking channel and the second signal tracking channel to obtain a carrier wave jamming signal;

tracking the carrier wave jamming signal; and

canceling the carrier wave jamming signal from the spread spectrum signal.

10. (Original) The method of claim 9, where canceling further includes:

generating a replica carrier wave jamming signal having a phase from the carrier wave jamming signal having another phase; and

subtracting the replica carrier wave jamming signal from the spread spectrum signal to cancel the carrier wave jamming signal.

11. (Original) The method of claim 10, further includes:

Serial No.: 10/689,565
Docket No.: ST02010USU (246-US-U1)

rotating the phase of the replica carrier wave jamming signal.

12. (Original) The method of claim 11, further includes:

Adjusting the phase of the replica carrier wave jamming signal to match the other phase of the carrier wave jamming signal in the spread spectrum signal.

13. (Previously Presented) The method of claim 9, further includes:

configuring the crosscorrelator with a code of all ones for the pseudo random number (PRN) code.

14. (Original) The method of claim 9, wherein the spread spectrum radio signal is a position signal.

15. (Original) The method of claim 9, wherein the crosscorrelator is at least a 1024 bit wide correlator.

16. (Original) The method of claim 15, where the crosscorrelator further includes:

filtering with an at least a 1024 bit wide match filter.

17. (Previously Presented) A receiver in receipt of a spread spectrum radio signal having a first signal tracking channel and a second signal tracking channel, comprising:

Serial No.: 10/689,565
Docket No.: ST02010USU (246-US-U1)

demodulation means for demodulating a first signal in the spread spectrum radio signal into the first signal tracking channel and a second signal in the spread spectrum radio signal into the second signal tracking channel;

correlation means for correlating the first tracking channel and the second tracking channel;

computation means for computing a product of the first signal tracking channel and the second signal tracking channel to obtain a carrier wave jamming signal, when the correlation means is in a carrier wave jamming identification mode and employs a fixed predetermined code for pseudo random number (PRN) code;

means for tracking the carrier wave jamming signal; and

canceling means that cancels the carrier wave jamming signal from the spread spectrum signal.

18. (Original) The receiver of claim 17, where cancellation means further includes:

generating means for generation of a replica carrier wave jamming signal having phase from the carrier wave jamming signal having another phase; and

subtracting means for subtraction of the replica carrier wave jamming signal from the spread spectrum signal to cancel the carrier wave jamming signal.

19. (Original) The receiver of claim 18, further includes:

means for rotating the phase of the replica carrier wave jamming signal.

Serial No.: 10/684,565
Docket No.: ST02010USU (246-US-U1)

20. (Original) The receiver of claim 19, further includes:

means for adjusting the phase of the replica carrier wave jamming signal to match the other phase of the carrier wave jamming signal in the spread spectrum signal.

21. (Previously Presented) The receiver of claim 17, further includes:

means for configuring the correlation means with a code of all ones for the pseudo random number (PRN) code.

22. (Original) The radio receiver of claim 17, wherein the spread spectrum radio signal is a positioning signal.

23. (Previously Presented) The receiver of claim 17, wherein the correlation means is at least a 1024 bit wide correlator.

24. (Previously Presented) The receiver of claim 23, where the correlation means further includes:

an at least a 1024 bit wide match filter.